CHRS official
JOURNAL
Vol.4 No.3 September 1979

Feature Set: Crosley Trirdyn 3R3 • The Nernst Glower
ARCA Conference • Muchow's Historical Radio Museum
Great Fire of 1929 • A Trip to England

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Dr. Charles D. Herrold Award:
Bruce Kelley (1978)
Joe Horvath (1979)

Honorary Lifetime Member:
Paul Courtland Smith (1978)

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Address membership correspondence to James Cirner, CHRS Treasurer, 13366 Pastel Lane, Mountain View, CA 94040. Articles and non-commercial ads for the Journal should be submitted to Allan Bryant, Editor, 38262 Ballard Drive, Fremont, CA 94536. Historical data for copying or donation should also be sent to the Editor.

THE SOCIETY: The California Historical Radio Society is a non-profit corporations chartered, in 1974, to promote the restoration and preservation of early radio and radio broadcasting. CHRS provides a medium for members to exchange information on the history of radio, particularly in the west, with emphasis in areas such as collecting, cataloging and restoration of equipment, literature and programs. Regular swap meets are scheduled at least four times a year, in the San Jose area.

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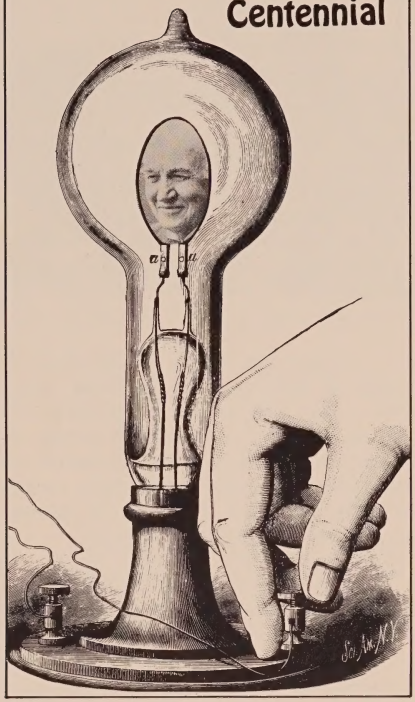
The OFFICIAL JOURNAL of CHRS is published quarterly and furnished free to all members. The first issue (published in September 1975) is still available ($2.00), other early issues are $1.00 each. Articles for the Journal are solicited from all members. Appropriate subjects include restoration hints, information on early radio broadcasts and personalities, anecdotes about the pioneers, etc. Anyone interested in assisting in producing the Journal should contact the Editor.

CHRS Journal designed by Quintessence Graphics

Great Fire of 1929

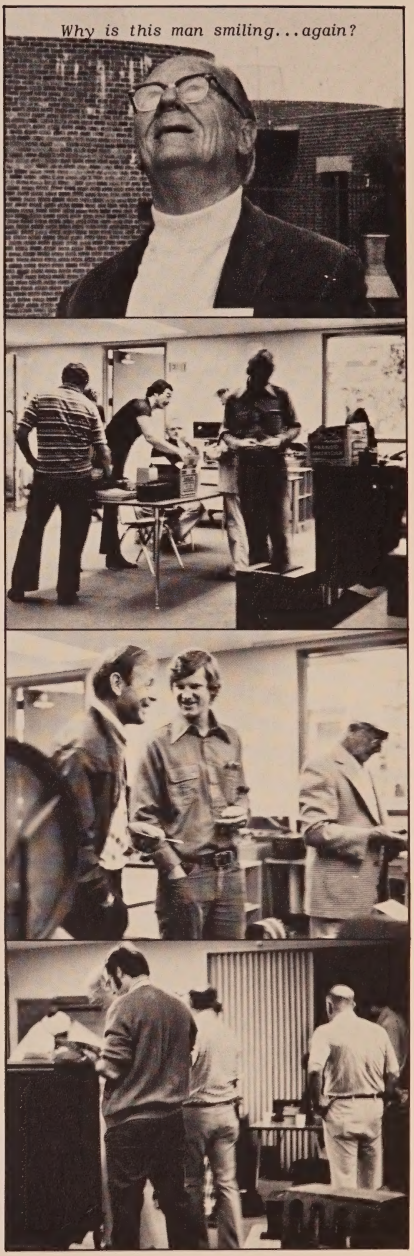
These two photographs are enough to excite the radio collector into vowing never to collect another radio in his life. The photos are authentic and are given courtesy of Mr. Bill Trevethen (now retired and living in Long Beach). In June of 1929 near the present location of the Boeing plant on E. Marginal Way and the Duwamish River, the Philco Direct Factory Distributing Branch in Seattle held a publicity stunt. Mr. Hall, Mr. Bode and Mr. Bill Trevethen (then working for Philco in Seattle) saw to it that these "old" battery sets, which were taken in as trade-in on newer AC models, were piled up in a dump area and burned (to-the-ground and 'dozed over). The sets represented about a 30-day trade-in period. Does anyone recognize an AK5 or Federal 61 among other sets in the picture? *submitted by Floyd A. Paul*

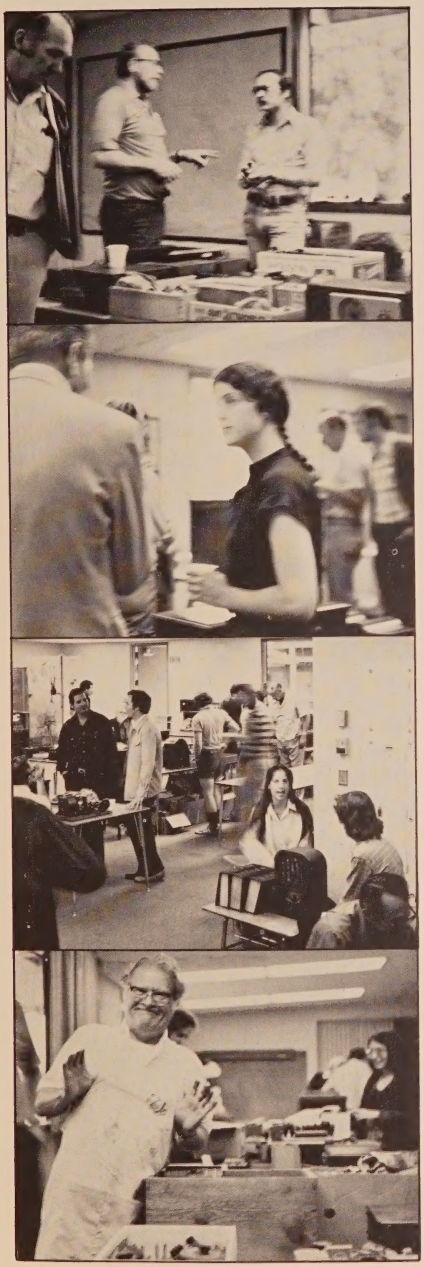
Edison's Light Centennial



One hundred years ago this October Thomas A. Edison brought light to the world with his invention of the incandescent lamp.

Out of his laboratory in Menlo Park, New Jersey came hundreds of ideas to benefit mankind. Among them, although Edison was deaf from his youth, was the phonograph. But, aside from the microphone, the invention from which radio benefitted most was "The Edison Effect," the flow of electrons from a hot lamp filament, discovered in 1883. Application of this effect years later produced rectifiers and radio tubes.





ARCA Conference

This national organization held its 1979 Conference during the three days ending June 23, 1979 at the Holiday Inn in Elgin, Illinois. Approximately 200 attended the affair which featured visits to the famed Muchow's Historical Radio Museum, Dr. Ralph W. Muchow, Curator. More about this extraordinary Museum on page 10 of this Journal. A unique touch to the Museum visitations was the array of antique Model "T" automobiles used to transport members from the hotel to the Museum. The Conference was most successful and included a flea market, old equipment contest, special ladies' program, technical sessions, and the annual banquet. The program included sessions on restoration techniques, the history of microphones, early broadcasting and restoration of Scott receivers, early television, rewinding transformers and a presentation of the history of the early radio manufacturer, The John Firth Company.

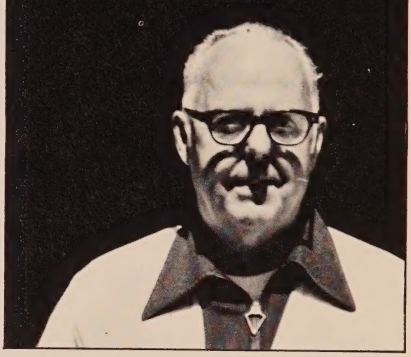
Winners of the Old Equipment Contest were as follows: Crystal receivers - Marconi A, TRF sets - Golden Leutz Pliodyne 9, Regen. receivers - Paragon 111, Superhets. - Norden Hauck C-10, Transmitters - BC11A with generator, Tubes - Set of Cunninghams, Replicas - 1915 Multiple tuner, Cathedrals - Crosley, Early TV's - Jenkins scanning disc, Loops - Bodine, Misc. - Parkin audio control panel, Tuned circuits - AK5.

Best of Show
Golden Leutz Pliodyne

The Antique Radio Club of America is to be congratulated on a splendid Conference.

The Nernst Glower

by Floyd Lyons



In 1897 Dr. Walther Nernst of Gottingen, Germany invented a new type of lamp. He had been intrigued with the rare earths used by Welsbach in his famous gas mantles, which permitted them to be burned in open atmosphere and still not be consumed. Nernst came up with an innovation of his own -- a non-combustible electric glower that did not have to be enclosed in a vacuum. Lane-Fox and Edison had suggested just such an illuminant, but Dr. Nernst was the first to pursue this subject to its commercially successful conclusion.

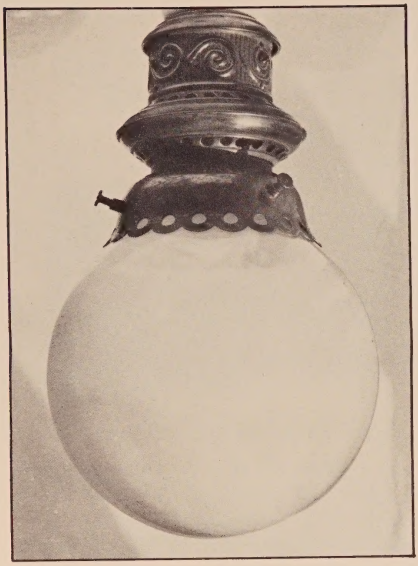
The accompanying schematic shows the four main elements of this lamp: (see Fig. 1) heater, glower, ballast and electro-magnet. The heater coil is made of fine platinum wire wound on a thin porcelain tube and imbedded in cement to protect it from the intense heat of the glower when the latter becomes white hot. The principal ingredient of the glower was zirconia, which is a non-conductor when cold, and progressively decreases in resistance as it becomes hotter. The ballast consists of an iron wire coil sealed in a bulb filled with hydrogen gas. Iron has the property of increasing in resistance when current increases, thereby off-setting the decreasing of resistance of the glower when it becomes hot. This setup can maintain a constant current through a 40 volt fluctuation. The electro-magnet is of the common garden variety.

Starting at the input, current first flows through the heater circuit. Remember, the glower is a non-conductor until hot. The heater is placed near the glower -- when the temperature is raised to approximately 700°C. (1300°F.), current begins to also flow through the glower. As the current builds up in the glower circuit, the magnet is actuated, attracting the armature and breaking the heater circuit. To prevent the glower from becoming overheated in its own circuit, a compensating or steadying ballast must be placed in series with it. This is the iron wire ballast described above.

When the power is turned off, the armature, working by gravity, drops and closes the heater circuit, thereby completing the cycle. The lamp is then in readiness for relighting.

References: "History of Electric Light" -- Henry Schroeder, 1923; "Electricity in Everyday Life" -- Edwin J. Houston, 1904; "Hawkins Electrical Guide #8" -- Hawkins & Staff, 1917; "History of Incandescent Lamp" -- Howell & Schroeder, 1927.

See also Magnetism & Electricity - BROOKS & POYSER - 1914



The schematic and lamp described above is known as the automatic type. The non-automatic came without a heater and had to be set in motion by a match, or some external source of heat.

The number of glowers incorporated in one lamp varied from one to six, although a 30-glower lamp was also made. In the multiple type, there was one ballast for each glower, but a doubling up on heaters was common. Six glowers may have only four heaters, for instance.

For power, 220 volts was used on all multiple-glowers, but either 110V or 220V could be used on the single. Alternating current was recommended, although it would also work on direct current. The latter shortened the life of the glower by as much as one half. This was due to electrolytic action. A black deposit formed on the negative and extended gradually to the positive end. As the deposit increased, the candle power and efficiency decreased. This problem did not exist with AC power.

Efficiency favored the Nernst glower over the ordinary carbon lamp of equal intensity (one glower equal to approximately 16CP). The initial efficiency of the glower was five lumens per watt as opposed to 3.4 for the carbon lamp. The former required about 88 watts per glower, as compared to 175 watts for the carbon lamp. Another asset of our subject lamp was the daylight quality of its light. It gave off a dazzling white light, which necessitated some form of a milk-glass globe to surround the complete unit. (Opal globes were common).

The Nernst glower appeared on the American market in 1900 with distribution & patent rights assigned to the Westinghouse Co. of Philadelphia. The lamp disappeared in about 1912 and one of the reasons for its downfall was a new lamp known as the Meridian. This was the usual vacuum type bulb, but made tipless to make it more decorative and, in particular, to compete with the Nernst lamp. And it was cheaper to operate. With the advent of tungsten lamps and that ever-present competitor, "progress," both fell by the wayside. For twelve years, though, many city streets, galleries, stores and homes were lit by Nernst glowers.

Note: This "Nernst Glower" article was first published in the "HORN SPEAKER" -- September 1974 issue (Vol. III No. 7), and is reprinted with permission of the author and the "HORN SPEAKER". Reproduction rights do not apply to this article.

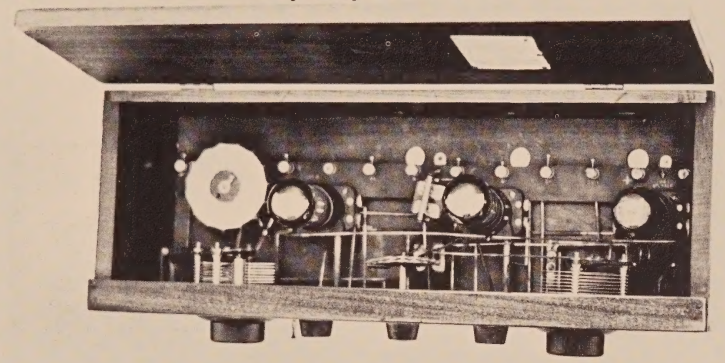
CROSLEY RADIO Trirdyn 3R3

The Trirdyn 3R3 is a three tube reflex regenerative receiver. The definition of a reflex circuit is one wherein a tube performs double duty, ie it performs as an RF amplifier while simultaneously performing as an audio amplifier. The mechanization of this is accomplished by sending an incoming signal through the tube, then after detection in a subsequent stage, the audio signal is routed back into the tube and amplified. Both signals (RF and AF) are present at the input and in the output circuits of the reflex tube circuit. It only remains for the inductive circuits in the output to properly accept/reject the RF/AF and pass the signal onto the next appropriate stage for processing. Low amplification tubes of the 20's helped bring this type of circuit into popularity. The reflex circuit allowed increased set gain without adding additional tubes. (about ten years later high gain pentode tubes were to be available giving gains of 100's and into the 1,000's.)

The Trirdyn 3R3 uses the 1st tube as an RF and 1st audio, the second tube as a regenerative detector and the 3rd tube as a 2nd audio. So in addition to the reflexed stage, the 3R3 uses a regenerative detector. This stage performs increased amplification by coupling plate (output) back into the grid (input) producing regeneration. The result is not only a greatly increased sensitivity of the detector to weak signals but a stepped up or amplified volume. Thus it can be seen the 3R3 could be considered a "hot" performing set with only three tubes. (The 3R3 designation probably symbolized 3 tubes-reflex circuit.) Crosley advertised the 3R3 as a three tube set performing the function of 5 tubes. The schematic is shown in Fig. 1.

The set is shown in the photographs which offer a front view, and a top inside view. Most of Crosley's major components were Crosley embossed, ie sockets, audio transformers, rheostats. Some smaller components were purchased, such as type 601, .0002 ufd Dublier Micadon capacitor and others. To get an optimum signal (quality and quantity) out of this

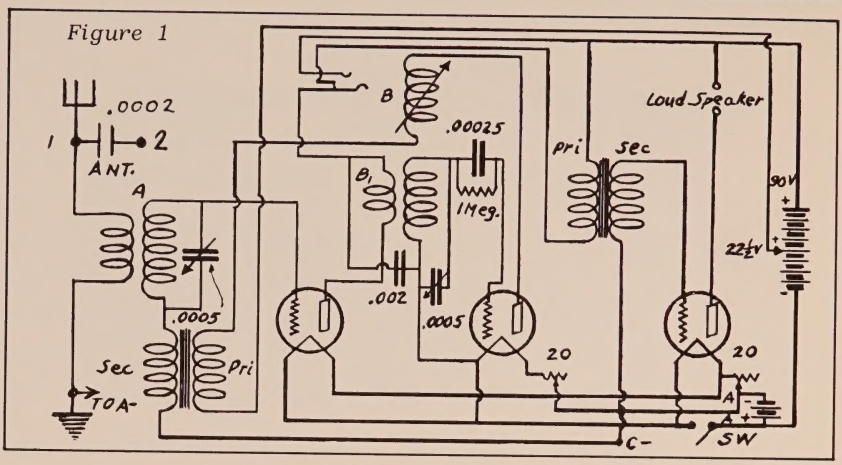
by Floyd A. Paul



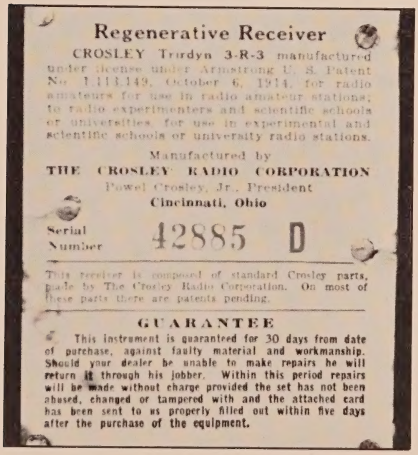
regenerative set the following controls need to be tuned: 1st RF tuner, 2nd RF tuner, RF & AF rheostat, detector rheostat, detector plate voltage and regeneration. This 3R3 was no exception to the above. However so as to reduce the variables the detector E_p was selected as 22½V (but was often reduced to 15V or less to reduce regeneration) and the RF & AF rheostat was adjusted to give maximum filament voltage to those tubes. This allowed most tuning to be done with the two tuning condensers, the regeneration control and the detector rheostat control. The performance tests were run with an RCA Radiola UZ 1320 horn speaker, and electronically regulated 5V, 2A power supply, a 20 ft. antenna and a Sterling "B" eliminator for the plate voltages. 01A tubes were used in the standard sockets.

Observations: One gets to do a lot of adjusting since these sets are not stable like superhets and trf sets. Although the schematic supplied by Riders shows 90 volts for the RF and AF tubes, 45V was taken as a convenient minimal operating voltage. 22½V was used on the detector and a bias supply of 2V chosen because with only 45V on the plates, anything higher tended to bias the tubes toward cutoff. Better quality sound was obtained with RF & AF tube rheostat adjusted to give those filaments a maximum of 5V. The detector rheostat was then used as the primary volume control. With the rheostat on the detector turned to give maximum filament voltage and the RF & AF rheostat used as a volume control it was found that on several strong signals (in the Los Angeles area) the rheostat of the two amplifier tubes need only be turned to a level where the two amplifier tubes were using 1 ma. combined. The signal level out of the horn apeaker was moderate (perhaps even considered to be moderately loud for a horn speaker) A quick calculation would show the final audio tube to be consuming (45V x .0005A) or about .02 watts of plate power. That is an unusually low power consumption for a final audio output state.

Figure 1



The detector voltage E_p of down to 8 volts tended to work fine. With no bias on the RF and AF tubes, and at 45V on the plate the tubes only drew 3 ma. together. The Trirdyn 3R3 uses "Armstrong Regeneration." (sidelight -- Edwin Armstrong began experimenting with wireless at the age of 15, and in 1913, while still a student at Columbia, he discovered the now famous feed back or regenerative circuit.)



Regenerative Receiver

CROSLEY Trirdyn 3-R-3 manufactured under license under Armstrong U. S. Patent No. 1,113,149, October 6, 1914, for radio amateurs for use in radio amateur stations; to radio experimenters and scientific schools or universities, for use in experimental and scientific schools or university radio stations.

Manufactured by
THE CROSLEY RADIO CORPORATION
Powel Crosley, Jr., President
Cincinnati, Ohio

Serial Number 42885 D

This receiver is composed of standard Crosley parts, made by The Crosley Radio Corporation. On most of these parts there are patents pending.

GUARANTEE

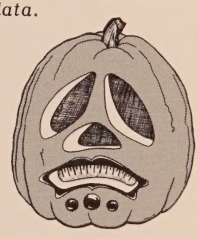
This instrument is guaranteed for 30 days from date of purchase, against faulty material and workmanship. Should your dealer be unable to make repairs he will return it through his jobber. Within this period repairs will be made without charge provided the set has not been abused, changed or tampered with and the attached card has been sent to us properly filled out within five days after the purchase of the equipment.

Membership Applications

As a service to our members, we have applications for membership available for the following organizations:

Antique Wireless Association
British Vintage Wireless Society
The Canadian Vintage Wireless Association
Indiana Historical Radio Society

Contact Dave Brodie for applications and/or additional data.



the Cover

In keeping with the season, our cover features the rare Jackodyne, one of the more esoteric midget receivers created in that period of excess. The set pictured was recently restored by Jim Cirner. An unusual feature is the antenna, which is cleverly disguised as a vine, thus adding to the decor of the room in which it resides.

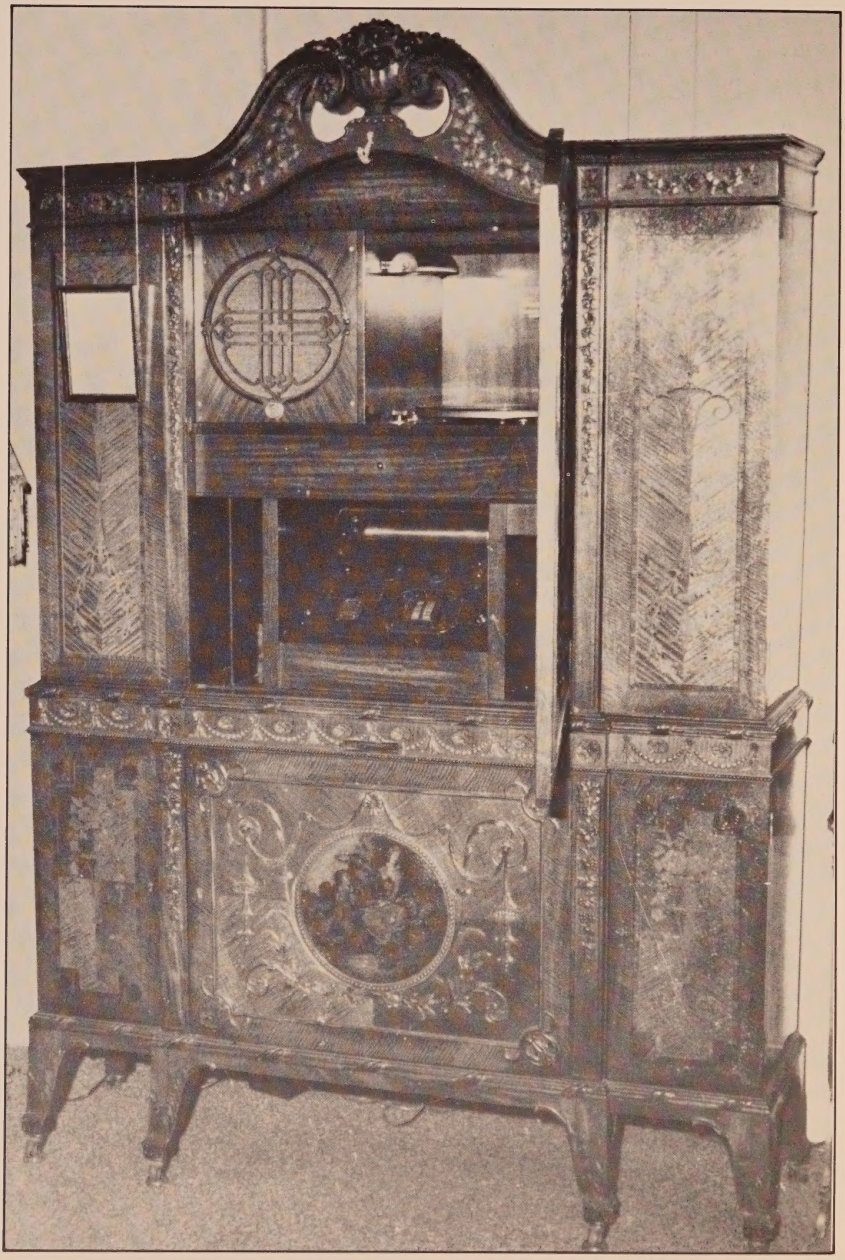
THE SHRIEKING AND MOANING OF THE RADIO

A descriptive poem from life by Eugene Lester

published by Frank Harding, copyright 1926

discovered by Woody Wilson

"Last night as I slept on my cot all alone
I tossed on my pillow and awoke with a groan
Horrible moans aroused me from my slumber so deep
I tried all in vain to get just one wink of sleep.
A radio Fiend living right across the way
Kept twisting and turning his dials and say!
When this bird started in I just flew into a rage
They should put this culprit in a big padded cage.
'I have CHILE' he yelled to his wife last night
Then stuck his head out the window and got chilly alright
'Next I'll get smoky Pittsburgh, the hour is just ripe'
But all that he got was the smoke from his pipe.
'Let's try a new bulb,' to his spouse he did shout
'Gee, my ARIEL is bad and my STORAGE BATERY is out.'
Twixt this chatter and squeaking which is all tommy rot,
It's enough to put a poor guy on Hospital Cot.
I crept back into bed, on my face was a scowl,
When I heard a gruff voiced announcer deeply growl,
'Station COD speaking from our Studio straight,
You'll soon hear sweet Music Folks stand by and wait.'
Soon nerve wrecking STATIC permeated the air
There was loud moaning and shrieking heard everywhere
Then some Up State Quartette sang way off key
And a Tinn Canny Jazz Band was heard from Kandakee.
And they call it sweet Music, oh dear heaven forbid
'Twas enough to make a poor man go right off his lid
Next a Wireless Fanatic who lived in the rear,
With an old One Tube set, far from being clear,
Made the night really hidious with the squeaky machine
His loud speaker made me almost Loco in the mean
Still another Radio Bug above in the floor over me
'TUNED IN' on one Station, but connected with three.
He has some Balky set, oh, so ponderous in size
He's the craziest of all Radio Guys.
He fussed around with his set the whole night long,
And at Breakfast this Gazabo was still going strong.
Broadcasters sure hand out some terrible stuff
They treat Mister Microphone oh, ever so rough,
Just a Conglomeration deny it no one can
Is forced a la howls and shrieks on the Radio Fan.
Where's the dear Social Homestead of yesterday?
Have the old Fashioned Melodies all passed away?
Oh, those Sunday Nights in the Parlor where sweet music'd ring
'Round an old plain Piano folks would gather and sing
Times now surely have changed how the old timers yearn,
For those Old Days once more, will they ever return?
Meanwhile I must 'LISTEN IN' night and day you know
To the moanings of that thing they call the Radio.
The Soprano, The Tenor, The Alto, The Bass,
They sing and they moan,
But ne're one show their face
'Tis a terrible noise a shriek and a moan
It's driving me looney I soon must leave home.
'Tis a fad 'tis enchanting some people say,
To have some one shouting a thousand miles away.
If I had them near me I'd quick throw a brick
Such moaning and shrieking will make us all sick.



Muchow's Historical Radio Museum

by Dave Brodie

The name Dr. Muchow frequently is mentioned wherever collectors gather since his Museum is recognized as being one of the premier private Museums of its kind in the country. However, we must recognize that many of us in the area primarily served by this Journal may never have the opportunity to personally see this fine collection. We contacted Dr. Muchow and asked his assistance in "bringing" his collection to the Coast, at least through narrative and photographs. He kindly consented and provided the following background information together with selected photographs of his immense collection. Our thanks to Dr. Muchow for his cooperation.

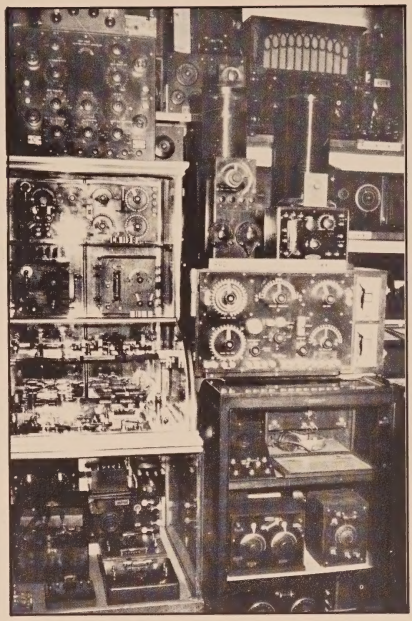
The Curator, Dr. Ralph W. Muchow is a practicing dentist who early in life developed a keen interest in radio and constructed crystal sets and one and two tube sets at the age of ten years. In 1959, Dr. Muchow purchased the two floor building which houses the Museum, but did not commence acquiring a collection until 1967. At the present time, the Doctor's offices occupy the first floor. The second floor and part of the basement are devoted to the Museum.

The collection now numbers approximately 2000 receivers and transmitters together with thousands of tubes and components. About 2000 tubes are on exhibit including a complete Geissler tube operating display. Dr. Muchow specializes in Atwater Kent receivers and has on display 49 of the highly treasured early breadboard sets, each of which is a different model from the others. He is approaching his goal of exhibiting one of each AK model (including variations of each model) of all sets produced from 1921 until the Company ceased manufacture during 1936.

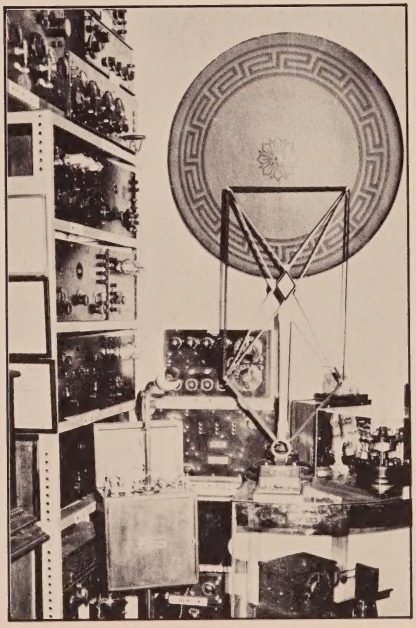
The Museum covers approximately 3000 square feet of space and consists of 11 showrooms plus a service area in which Dr. Muchow handles necessary restoration. All equipment on display is in working condition. Another feature of this extraordinary Museum relates to the service area in which is an original service bench of the type provided by Atwater Kent to certain distributors who also serviced the Company's products. Dr. Muchow explained that the purpose of the Museum is to document the history of wireless from the days of Marconi to the development of scanning disc television. To this end, the Museum's displays have been arranged in sequence in order that the visitor many follow this development as he progresses through this collector's "Paradise."

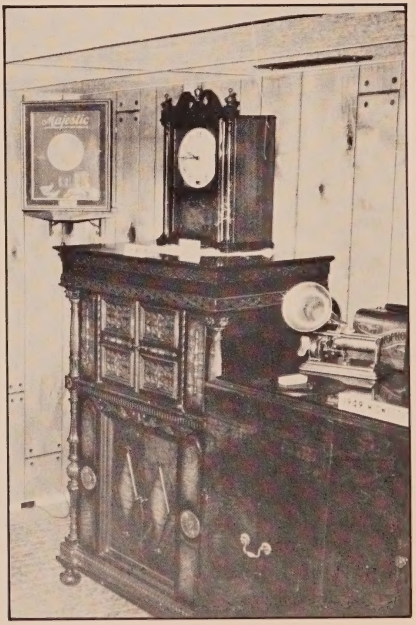
To those of you fortunate enough to be in the Chicago area (about 30 miles from the Museum), contact Dr. Muchow to arrange for a visit: Muchow's Historical Radio Museum, 107 Center Street, Elgin, Illinois 60120. Phone, Museum: (312) 742-0183; phone, Residence: (312) 741-0573.

Radio
KOLSTER RADIO



ATWATER KENT
RADIO




Majestic

Photography by Paul Sommer

PUBLICATIONS

"RADIO ENTERS THE HOME"

This is the title of a 128 page book originally issued by RCA on June 1, 1922. The Vestal Press has recently released a reprint of this rare publication and we provide hereunder excerpts from a release issued by the Publisher.

"Today we take such miraculous devices as computers, television sets, the telephone, radio, and all our modern-day electronic devices pretty much for granted. It's hard to realize that radio, the forerunner of our great electronic age, burst upon the scene only three generations ago!

"In 1922 the Radio Corporation of America published a fat 128-page book that set the stage for its entry into the huge consumer market in a big way. Entitled 'Radio Enters the Home,' it's subtitled 'How to enjoy popular radio broadcasting, with complete instructions and description of apparatus.' 'For those who desire to be entertained with radio concerts, lectures, dance music, and for the radio amateur and experimenter.'

"Jammed with pictures and drawings of apparatus made by RCA, General Electric, Westinghouse, and other great corporate names, it's a treasure trove of information for today's radio amateurs, radio collectors, and everyone interested in electronic matters.

"The Vestal Press of Vestal, New York has just released a quality reprint of this exceedingly rare volume for the benefit of those who like to study a time when life was maybe a little less hectic and perhaps a bit less complicated than it seems to be today!

"Copies of this 8½xll size paperback book are available directly from the publisher at PO Box 97, Vestal NY 13850 for $12.50 plus 50¢ shipping, or through any bookstore."

by Dave Brodie

Radio Enters the Home
For those who desire to be entertained with concerts, lectures, dance music as well as for the Radio amateur
Radio Corporation of America

We have reviewed a copy of this publication, found it to be a faithful reproduction of the original and, in fact, must say that many of the reproduced photographs are sharper and clearer than those in our original publication.

"FROM SPARK TO SATTELITE"

A short and laudatory commentary on this publication appears in the June OTB of AWA. To non-members of AWA, let us say that the book consists of 20 chapters ranging from Marconi to lasers. The author, Stanley Leinwoll, is a former RCA employee, engineer with Voice of America, and Director of Radio Free Europe. The book is large format, 6"x9", has

42 photographs and 44 drawings. Published by Charles Scribner & Sons. Price $14.95/$12.50. Unfortunately, we were unable to obtain a copy at local bookstores at date of this writing for a personal review. We hope to review this work in depth in our next issue.

The June OTB of AWA also mentioned a recent book covering Nikola Tesla's work and indicated this may be the best coverage yet given to this famous inventor. We intend to cover this publication in depth in our next issue. Meanwhile, those interested may wish to write the publisher for more information. Contact Ragusan Press, 1372 Rosewood Avenue, San Carlos CA 94070.

"STORY OF ELECTRONICS"

We dropped in to our friendly neighborhood Radio Shack store and received a copy of their new Science Fair Story of Electronics. This is definitely geared to attract the young reader, consists of 26 pages of well-illustrated narrative in "comic-book" format, covering the field from magnetism to satellite communication. These booklets are issued free of charge. Why not get one on your next visit to Radio Shack, look it over and, above all -- pass it on to some youngster.

The June issue of this Journal discussed Booklet #4 sold by Puett Electronics and titled "When Was That Old Tube Made?" Copies of Booklets #2 and #3 have been received and are reviewed hereunder.

Each Booklet is eight pages in length. #2 is captioned "The Complete Restoration of Battery-Powered Antique Radios," whereas #3 deals with the restoration of antique AC radios. These Booklets are limited to technical restoration and, as the author states, are not to be considered as panaceas for all problems which may be encountered. These publications would be of definite value to the beginner, although even the experienced restorer may find a wrinkle here and there.

It is interesting to note that the author hopes to publish a Booklet on refinishing wooden cabinets and the restoration of existing finishes. This indeed sounds promising, as many of us can use help in this area, in particular. We hope the author treats that subject in depth.

Booklets #2 and #3 are $2.00 each, and may be obtained from Puett Electronics, PO Box 28572, Dallas, Texas.

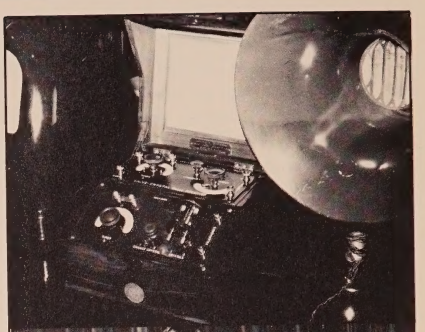
The serious wireless historian will undoubtedly find rare additions to his library by reviewing catalogues available from: Bampton Books, "Franklyn," Deymans Hill, Tiverton, Devon, EX16 4LL, England, UK. This firm specializes in rare, second-hand, and out-of-print publications and issues an interesting catalogue.

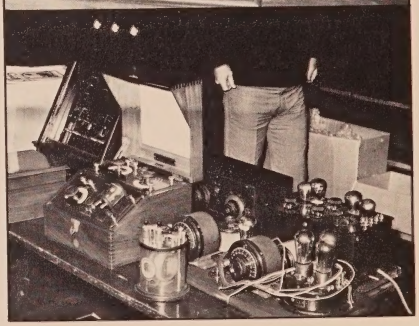
A reprint of a 1919 Welch Scientific Company "Wireless Apparatus" catalog is now available. It pictures loose couplers, audion detectors, spark gear, etc. Price, $1.50 plus 30¢ mailing.

In addition, a single-page reprint from Montgomery Wards 1922 General Fall and Winter Catalog (page 540) is available. This page illustrates their radio apparatus line of that year. Price, 25¢ plus 15¢ mailing. Write: Marshall Helms, 127 King George Road, Greenville, North Carolina 27834.

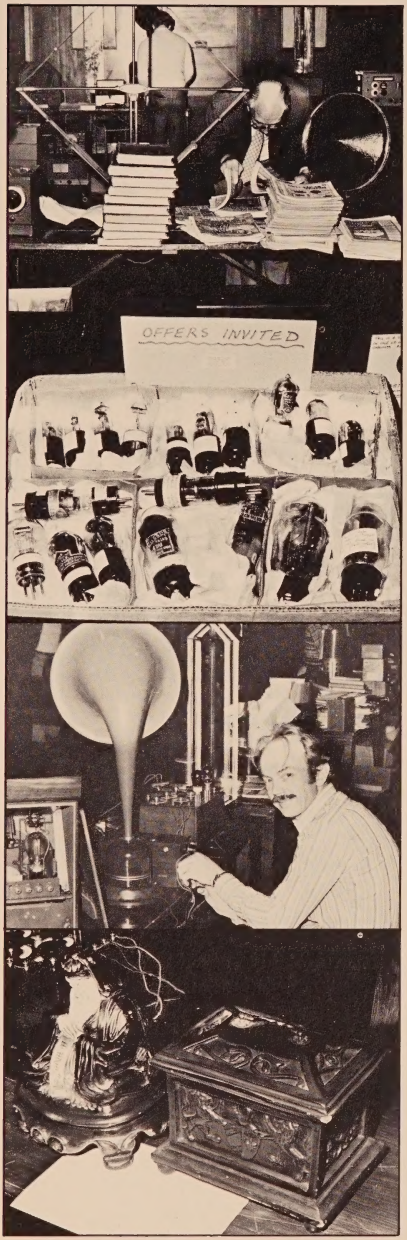
A Trip to England

by George Durfey





It was my good fortune to be in the vicinity of London at the time that the British Wireless Association was to have its annual general meeting. My good friend Dave Brodie, upon learning that I was going to be in London about that time, put the bug in my ear to attend the meeting. So, upon my arrival I immediately got on the horn and called some of the members. Roger Snelling, a good friend of Dave's, took it upon himself to squire me around and invited me out to his country place the day before the meet. Roger and his wife Margaret have built themselves a cozy cottage out in the country near Diss, which is about an hour's train ride northeast of London. The countryside is beautiful, and especially appreciated by me, was calm. Roger and I of course had quite a bit to talk about, especially on the subject of old radios. Roger has some of his collection there. Margaret had been cooking, preparing for the next day's meet, and I was invited to partake a sampling of what she had prepared: steak and kidney pie. I ate more than my share of that delicious meal. Who says the British don't know how to cook? We also took a ride around the area, ending with a lovely walk, bird



watching and just enjoying the country. How nice it was.

Early the next morning, after a delicious breakfast, off we went to the meet. I must admit, although Roger's driving was flawless, I couldn't get used to the cars on the "wrong" side of the road. I kept wanting to holler out, "Hey, get over on the right side of the road!" My fears not withstanding, we did arrive at the meeting place in good shape. The meeting hall used is in the town of Harpendon, just north of St. Albans, and about 15-20 miles northwest of London. Conveniently, the meeting was held in the Harpendon Public Hall, located just behind the Harpendon Arms Pub.

Unlike our meetings, there wasn't the early-bird contingent, most people beginning to arrive on the scheduled meeting time of 11 am. The public hall or auditorium resembled many school auditoriums or gyms here in the States and was about the same size. Folding tables were soon brought out and the swappers and swapees began to fill them up. The breadth and range of their collecting seems about the same as ours, with perhaps a bit more emphasis on the AC sets.

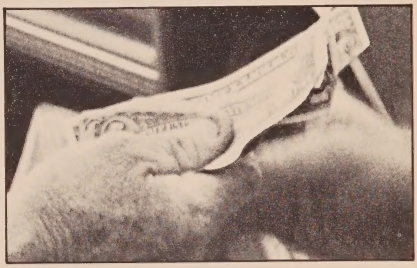
I did take pictures, as is often my want, of the meet -- some of which appear with this article. Perhaps those of you who are more knowledgable will be able to identify all of the sets. The greater portion of the gear was British with names such as Marconi (who was he?), Pye, BTH, and others I can't recall. I saw also, a few nice European sets such as made by Loewe. Also present were a couple of Breadboards, an AK9 and an AK10, as well as Crosleys, an RC, and oth

ers. Tubes and old magazines as well as a coterie of parts were all there to be looked at, traded or purchased. For the most part it seemed to be that most of the desireable items were not for sale but for trade only. This made it rather difficult for me since I didn't bring anything along. However, it was a fun place to be and a good gang to be with.

Sometime about noon, the girls, the wives, rang the bell for chow and for a nominal charge we were given the opportunity to partake of steak and kidney pies, sandwiches, and other such goodies, piping hot. Later in the afternoon the business meeting was held. The subjects discussed were varied, ranging from deciding what new literature reproduction should be made, to how to share components of an old BBC transmitter being disposed of. Nominations for new officers were made. The incumbents remaining in office, excepting for a rearranging of roles. Tony Constable gave up his post as Chairman to David Read. Tony will no doubt remain busy, since he's the Editor of the club's periodical. The meeting was lively with much audience response, and lasted for about an hour. At the conclusion of the meeting, business at the swap tables resumed.

Some of the sets were operating, which is always a pleasure to see and hear. People were still arriving. I'd estimate that about 80 or 90 people had come to the meet. Later in the afternoon the ladies served up tea and cake. Delightful. The meeting began to break-up later in the afternoon. Of course, just like in our meets, the officers helped to clean up afterwards.

Dave Read at this time took over as my escort, and at the close of the meeting we drove off to Roger Rayment's house for a spot of tea and gossip. Roger collects radios, phonographs and old medical equipment. The evening was not over for met yet. Dave took me to his home where we dined, his wife Gil preparing a lovely repast for us. Dave has a nice collection, which is interesting to see. He is also quite a knowledgable collector. It was close to midnight before I left him. How time flies! The next morning I left for home, after an all-too-short visit with a great group.



Market News

On June 13, 1979 the famous auction house of Christie's, South Kensington, London was the scene of an auction of antique radios, gramophones and music boxes. Among the radio lots, there was offered a Tingey No. 2 cabinet receiver with 175 to 2800 meters coverage, and two speakers. As is the custom, Christie's placed a pre-sale estimate of value of £20 to £30 on these items. Apparently the estimators were off-base in this instance, since two collectors decided that the items were most desirable and started a heavy bidding session. The result -- the items ultimately sold for an amazing £700 -- equivalent to roughly $1600!!!

Restoration Hints

by Joe Horvath W6GPB

Many of us have headphone and speaker cords that the metal tips have come off for some reason or another.

Here is the simplest way to re-solder the tip.

If the reader will place a phone cord in his hands and follow these directions I don't think there should be any problems.

1. Get yourself a piece of solid bare copper wire, about size 32 or 36. If you don't have the bare wire, then enameled will do, only first you must remove the enamel coating. The best way to do this is to lay the wire on some paper and with some #400 sandpaper gently remove the enamel coating; keep turning until all of the enamel is removed and clean.

2. Next, take one of the cord tips and by gently squeezing with both fingers work the cord covering out towards the open end until it won't go any further. With a pair of scissors cut off the end so that you cut some of the wire, too. Then push back the cord covering so that you have about a quarter-inch of the wire exposed.

3. Now take the bare wire that you have prepared and lay it on the cord about a good inch back and tightly grip with your fingers the wire and the cord together. Then proceed to wind the bare wire over the exposed cord wire until it is all covered but not stacked. With the scissors trim off the extra wire neatly. Now with your fingers grip the bare wire that you just wrapped and tightly wrap a turn or two around the cord covering so that it is smooth and tapered (as this has to slide into the phone tip later). Put some soldering paste on the tip of the bare wire.

4. Take the phone tip and place it in a vise. Heat the tip with a soldering iron and at the same time fill the tip with melted solder, putting the solder way down in so that it thoroughly fills and while the solder is still very hot, dip the prepared phone cord into the phone tip so that the cord covering goes well down into the tip. Hold the cord until it cools off. If there is a piece of the bare wire sticking out, nip it off with the scissors.

When finished, the phone cord covering should be well down into the tip itself and not pull out.

I have used this method for years and have never had a failure due to the connection not being good. The resistance is zero.

There are other methods also but this is the simplest.

Vintage tubes are available from: Micro Electron Tube, PO Box 55, Park Station, Paterson 3, New Jersey 07513. AC types 19 to 89 are stocked, and 01's and 99's are sometimes available. For a complete list and prices, write to the above address.

Editor's Corner

by Allan Bryant

The CHRS Nipper dog offer has expired. I hope everybody is enjoying their Nippers.

I would like to thank RCA, Old King Cole, and Tempo Products Company for making this offer available to us. A special thanks goes out to Mr. Larry Snyder, the Vice President of Tempo, who spent many hours interfacing with me. Larry set up the process, ironed out the details, and answered many of my questions.

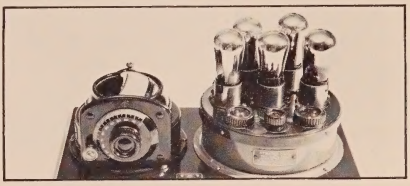
I would also like to thank RCA's Product News Department for their support. Mr. Howard Enders, Manager of Product News, has provided me with a large amount of information and many beautiful photos that will appear in future issues of the Journal.

While we're on the subject of the Journal -- why aren't many of you members sending in any want ads? Our Ad Section provides an excellent opportunity to reach collectors on the west coast. Just think, no more calling back east, only to find out that the item you wanted was sold a week ago. At present, only about five ads are received spontaneously, the rest are solicited by the Journal staff. Let's try for fifty ads in the December issue.

Homer E. Capehart is dead at the age of 82. Homer was a tenant farmer's son who, with only a high school education, was a three-term Republican US Senator from Indiana.

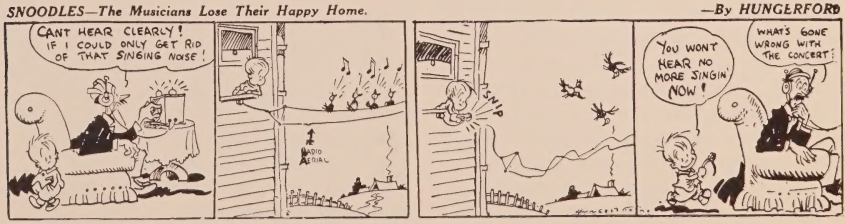
Capehart was a driving force in the early days of the juke box industry. He formed The Capehart Automatic Phonograph Corporation and in 1928 produced the "Orchestrope." In the early 1930's he and Farny Wurlitzer began producing Wurlitzer juke boxes. He became Vice President of Wurlitzer shortly afterward.

In 1940 he resigned from Wurlitzer, and began his political career. Capehart earned a reputation for being an honest politician and a good representative of the people of Indiana.



CORRECTION: to last issue's "Featured Set" article. The statement was made that a prototype set was presented to President Harding in August of 1921. That date is highly questionable, and if a set was presented to President Harding, a date of 1922 makes much more sense (and it might even have been 1923). Readers, be aware of this probable error in the quoted date.

SNOODLES—The Musicians Lose Their Happy Home. —By HUNGERFORD


CANT HEAR CLEARLY! IF I COULD ONLY GET RID OF THAT SINGING NOISE!
SNIP
YOU WONT HEAR NO MORE SINGIN NOW!
WHAT'S GONE WRONG WITH THE CONCERT?

—From the New York Evening Mail.

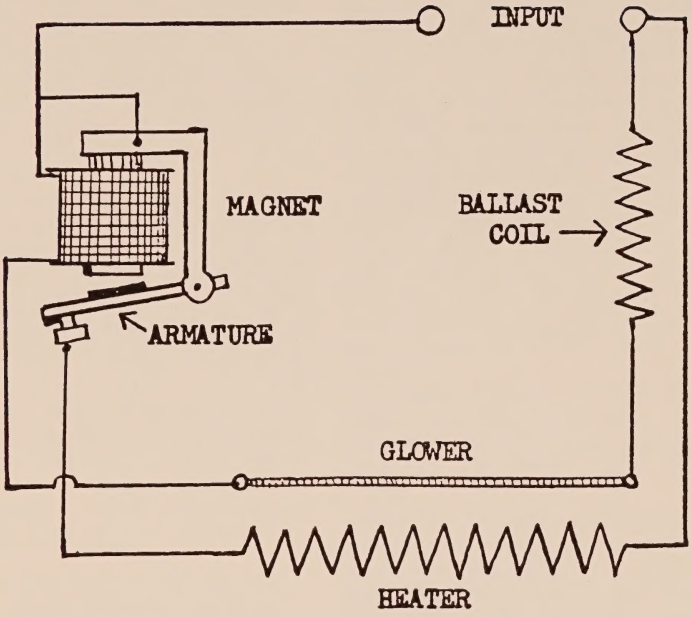


Fig. 1 Schematic for Nernst Glower
for Sept. '79 Journal

COLLECTOR AIDS

WANTED: 18" Magnavox horn (bell and gooseneck). Also need Magnavox driver for parts (diaphragm, clamp, cap). Need good or dud Emerson multivalve tube, and Welsh peanut tube. Allan Bryant, 38262 Ballard Drive, Fremont CA 94536 (415) 791-8967.

WANTED: Picture of Majestic 72 for replacing door; picture of Grebe 160 for replacing legwork; lid or ID tag for Radiola senior type RF. Norman S. Braithwaite, 1131 West Third Street #2, Chico CA 95926.

PHANTOM - CIRCUIT

Build Your Own. This marvel of mystery, using no loop, no aerial and no ground brings in music instead of interference. We have heard stations 950 miles distant on one tube. By using WD-11 tube set can be entirely self contained. Very easy to build from our instructions, use your own spare parts, nothing complicated like radio frequency or super regenerative. Only one tuning control. Complete instructions, with hookup and photo of circuit mailed to you for 60 cents. Stamps accepted.
Vesco Radio Shop Box RN-704 Vacaville, Calif.

WANTED: Philco Model 90 "Cathedral;" Scott-deluxe chrome models; also dial-tuner Philco Model 70. Advise condition and price. Jon Karstens, 1320 Soto Court, San Jose CA 95121 (408) 227-3463.

FOR SALE: Federal Model 110, $300.; National SW-5, $150.; Travler Portable, $50.; BTH (English Crystal set), $200.; National Model HO, $40.; Crosley Trirdyn, $45.; Crosley Model 51, $75.; WE 4D RCVR, $250.; Radiola loop for model 28, $30.; Grebe CR-9, $400.; AK-9 (variometer model), $625.; Marconifone II one-tuber, $425.; Crosley 50, $85.; WE 7A amp (less tubes), $70.; Philco Jr. Cathedral, $100.; BC-14A Crystal set, $350.; Magnavox R-3 horn, $75.; Crosley 52, $75. Paul Giganti, 2429 San Carlos Avenue, San Carlos CA 94070 (415) 593-4723.

WANTED: 1 complete set of coils for Pilot super-wasp. Dave Brodie, 315 Cotton Street, Menlo Park CA 94025 (415) 323-0353.

WANTED: Schematics and photographs (preferably chassis as well as panel views) of Heintz & Kaufman types 900 and 930 marine receivers; also of Wireless Egert type 303 and of Simon Radio receivers. H. L. Chadbourne, 530 Midway Street, La Jolla CA 92037.

WANTED: Schematics -- will gladly pay the going rate for the following schematics: ERLA-S51, Hammarlund Roberts 4 tube receiver, Clapp-Eastham Radak Model DD. QST's: need certain 1919 and 1920's; please contact. Base and driver for 14" Magnavox horn. Dave Brodie, 315 Cotton Street, Menlo Park CA 94025 (415) 323-0353.

WANTED: Atwater Kent Cathedral radio. Will buy or trade. Elliott Atkins, 1415 Briarwood Way, Stockton CA 95029 (209) 957-4233.

WANTED: Cabinet for Radio Specialties Co. model T-4, manufactured by the Radio Specialty Co., San Diego CA. Also want Magnavox TRF-5 and TRF-50. Larry Chambers, 5026 Sutter Drive, Nashville, Tennessee 37211.

WANTED: Uncle Al Crystal Set parts; need coils and detector. Allan Bryant, 38262 Ballard Drive, Fremont CA 94536 (415) 791-8967.

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For 5-Tube Neutrodyne Set **RADIO**

Live young man in every town and neighborhood, to own, operate and take orders for the licensed, standardized, synchronized "De Luxe 5-Tube Coast-to-Coast Neutrodyne" made famous in "The Radio Digest." Complete assembly retails only $34.19. Thousands sold. Furnished you at discount. Liberal financial arrangements. Write us all about yourself. Ask for plan. Also illustrated description of set. **Be First!**
THE RADIO SHACK, America's Largest Radio Dealers
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"Musings of Doctor Mu"—the story of the development of the Perfect Receiver, free upon request.

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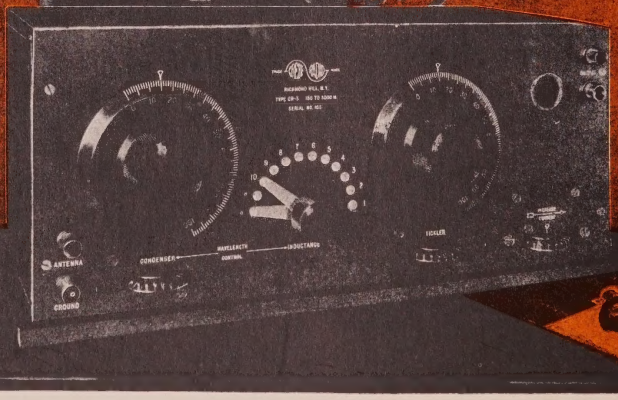

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